



Coordinated School Health

2021-22 Physical Education/Physical Activity (PE/PA) Annual Report

Tennessee Department of Education | October 2022

Cover image provided by Lawrence County School System

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Introduction

Tennessee Coordinated School Health connects physical, emotional and social health with education through eight inter-related components. This coordinated approach improves students' health and their capacity to learn through the support of families, communities and schools working together. Physical education and physical activity create one of those components. The Tennessee Department of Education's office of Coordinated School Health (CSH) is responsible for monitoring the implementation of the physical activity requirements of T.C.A. § 49-6-1021:

- (a) In accordance with § 49-6-1022, it shall be the duty of each LEA to integrate:*
 - (1) For elementary school students, a minimum of one hundred thirty (130) minutes of physical activity per full school week; and*
 - (2) For middle and high school students, a minimum of ninety (90) minutes of physical activity per full school week.*
- (b) Physical activity may include walking, jumping rope, playing volleyball, or other forms of physical activity that promote fitness and well-being; however, walking to and from class shall not be considered physical activity for purposes of this section. To satisfy the requirements of subdivision (a)(1), an LEA shall offer elementary students at least one fifteen-minute (15) minute period of physical activity per day.*
- (c) The office of coordinated school health in the department of education shall provide an annual report by October 1, to the education committee of the house of representatives and the education committee of the senate on the implementation of subsection.*
- (d) Nothing in this section shall prevent an LEA from integrating more student physical activity for elementary, middle, and high school students during the school week than required in subsection (a). The requirements of subsection (a) may work in conjunction with the school's physical education program, but subsection (a) shall not replace the current physical education program in a school.*

CSH works with every school district in the state to address all aspects of student health, with a special emphasis on reducing Tennessee's childhood obesity rates. Encouraging adequate physical activity and providing physical education for all students are the central tenets of the CSH model. With prevention as the focus of the CSH model, we hope to have a positive influence on physical, social, and economic health of our students' future.

CSH state grant funds are used by school districts to provide schools with physical activity/physical education equipment, physical activity/physical education curriculums, teacher professional development, walking trails, climbing walls, fitness rooms, and student fitness assessment systems/tools. CSH also oversees state physical education standards as set forth in Tennessee curriculum standards and the [Tennessee Physical Activity and Physical Education Policy 4.206](#) (Tennessee State Board of Education, 2020).



Photo provided by Giles County Schools

The Tom Cronan Act

In addition to the K-12 physical activity requirements detailed above, T.C.A. § 49-6-1021 also includes specific physical education requirements for elementary students. These requirements were included as part of Chapter 976 of the Public Acts of 2018, also known as “The Tom Cronan Act”:

(e)

(1) In addition to the integration of physical activity into the instructional school day according to subsection (a), each LEA shall require each student in elementary school to participate in a physical education class that meets at least two (2) times per full school week during the school year. The total physical education class time each full school week shall be no less than sixty (60) minutes.

(2) The physical education class shall meet the needs of students of all physical ability levels, including students with disabilities who shall participate in moderate physical activity to the extent appropriate as determined by the Individuals with Disabilities Education Act (20 U.S.C. § 1400 et seq.), Section 504 of the Rehabilitation Act (29 U.S.C. § 701 et seq.), or the student's individualized education program. An accommodation or alternative physical activity shall be provided for children with disabilities, if necessary.

(3) The physical education class required by this subsection (e) shall be taught by a licensed teacher with an endorsement in physical education or by a specialist in physical education.

(4) A student shall be excused from a physical education class for medical reasons. The LEA may require a parent or legal guardian to provide documentation of a student's reason for being excused from the physical education class.

(5)

(A) This subsection (e) shall not apply to any county having a population of not less than thirty-eight thousand three hundred (38,300) nor more than thirty-eight thousand four hundred (38,400), according to the 2010 federal census or any subsequent federal census, until the 2021-2022 school year; and

(B) This subsection (e) shall not apply to any county having a population of not less than fifty-seven thousand four hundred (57,400) nor more than fifty-seven thousand five hundred (57,500), according to the 2010 federal census or any subsequent federal census, until the 2021-2022 school year.

(f) Each LEA shall file an annual report with the commissioner of education verifying that the LEA has met the physical education requirements of this section.

(g) Subsections (e) and (f) apply to the 2020-2021 school year and each school year thereafter.

U.S. Physical Activity Guidelines for Children and Adolescents

According to the U.S. Department of Health and Human Services (2018), children and adolescents need 60 minutes (one hour) or more of physical activity each day.

Aerobic activity should make up most of a child's or adolescent's daily physical activity. This can include either moderate-intensity aerobic activity, such as brisk walking, or vigorous-intensity activity, such as running.



Photo provided by Anderson County

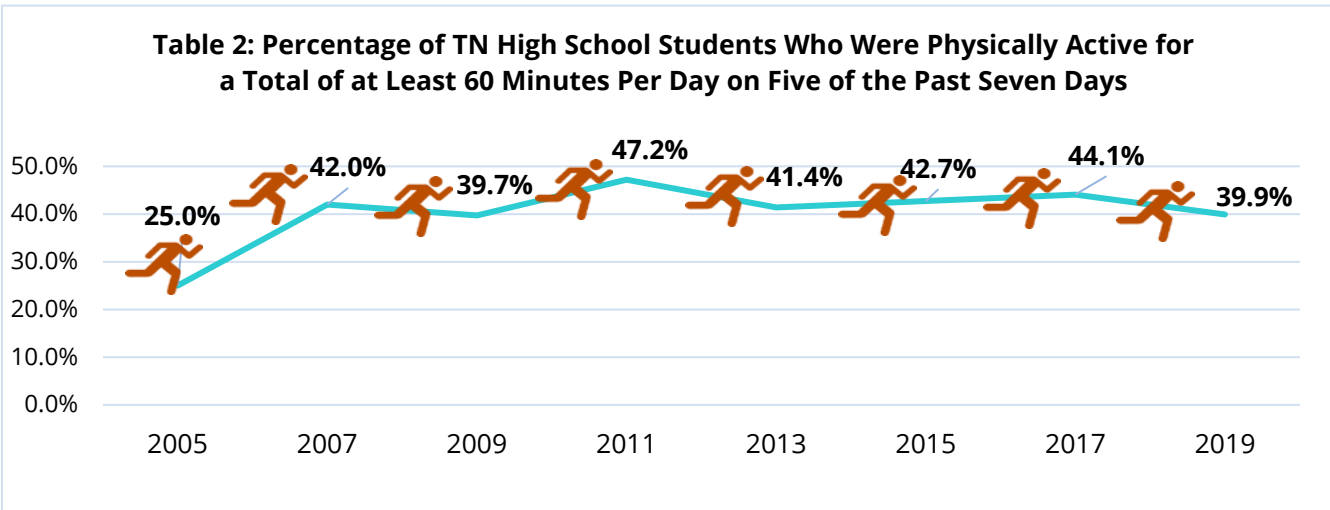
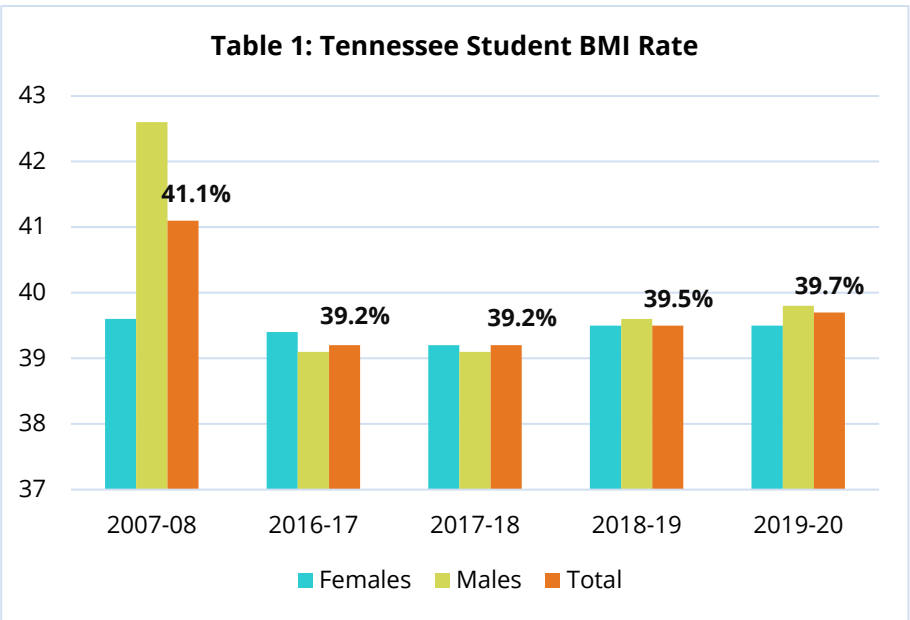
Physical activity should also include muscle strengthening activities, such as gymnastics or push-ups, and bone strengthening activities, such as jumping rope or running, at least three days per week.

Tennessee's Accomplishments

As indicated in Table 1, Tennessee student body mass index (BMI) rates have declined since the expansion of CSH statewide; BMI rates declined from **41.1** percent in 2007-08 to **39.7** percent in 2019-20, with a slight but steady increase over the most recent reportable years (Tennessee Department of Education, 2021). Due to insufficient statewide screening and reporting volume, 2020-21 data is considered at this time to be not valid or reliable. This was a direct impact of precautionary measures taken by schools initially returning to in-person instruction from the March 2020 statewide closure in response to COVID-19.

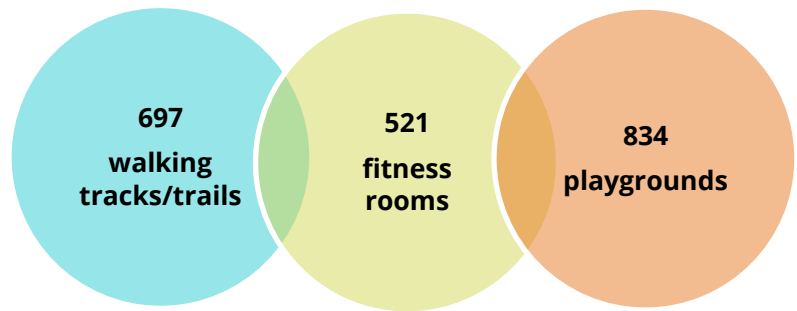
T.C.A. § 49-6-1021(a) enables schools to supplement the national recommendation of one hour per day of physical activity during the school day by ensuring students receive 130 minutes per week in elementary schools and 90 minutes per week in middle and high schools.

As indicated in Table 2, according to Centers for Disease Control and Prevention's (CDC) Youth Risk Behavior Survey (CDC, 2020b), the percentage of Tennessee high school students who reported being physically active for a total of at least 60 minutes per day on five of the past seven days **increased** from **25 percent** in 2005 to **39.9 percent** in 2019. That total is down from an all-time high of **47.2 percent** in 2011. This table does not have 2021 data because the YRBS administration was delayed due to COVID-19. This data is anticipated to be available by November 2022.



Since the implementation of CSH statewide, coordinators have secured funds for the following (Tennessee Department of Education, 2022a):

- 697 walking tracks or trails,
- 521 in-school fitness rooms for students, and
- 834 new and/or updated playgrounds.



Physical Education/Physical Activity (PE/PA)

T.C.A. § 49-6-1021 allows for a variety of activities to be used for schools to provide students with opportunity to move their bodies and for schools to demonstrate compliance with the minimum requirements. It is important, however, that utilization of this variety is the key to positive health, academic, and behavioral outcomes, as opposed to limiting options.

The Society of Health and Physical Educators (2019) encourages the use of regular physical education classes in addition to other physical activities in the instructional school day and makes clear that physical activity is neither an equivalent to nor substitute for physical education—both contribute meaningfully to the development of healthy, active children.



Photo provided by Anderson County Schools

Physical Activity and Academic Performance

According to the CDC (2010), when children and adolescents participate in the recommended level of physical activity—at least 60 minutes daily—multiple academic benefits accrue. Academic achievement is defined as including academic performance (test scores and grades), educational behavior (attendance, dropout, and classroom behavior), and cognitive ability and attitude (attention, memory, and mood).

As Michael et al. (2015) identifies, researchers have been examining the association between physical activity and academic achievement for almost 50 years. Physical activity has been shown to have a significant positive association with students' cognitive functioning (concentration and memory). Findings also conclude that students participating in physical activity had improved academic achievement including better concentration and attention, higher achievement tests scores, and higher math scores compared with students who did not.

Substantial evidence shows physical activity can help improve academic achievement (including grades and standardized test scores) as well as have an impact on cognitive skills and attitudes, such as enhanced concentration and attention and improved classroom behavior.

Physical Education

Devoting time to physical education may have a positive relationship to academic achievement or may not negatively affect it. There are also favorable associations with cognitive skills and attitudes.

Physical Activity Breaks

Offering breaks for physical activity may be associated with decreases in classroom misbehavior, increases in cognitive functioning (including memory and concentration), and increases in academic achievement.

Recess

Recess can help students increase their daily physical activity and contribute to getting the recommended 60 minutes of physical activity each day. Recess is also an essential part of students' school experience that contributes to their normal growth and development. Recess helps students practice social skills (cooperation, following rules, problem solving, negotiation, sharing, communication), positively engage in classroom activities (being on-task, not being disruptive), and enhance cognitive performance (attention, memory). (CDC and SHAPE America, 2017)



Photo provided by Franklin Special School District

Extracurricular Activities

Research from Singh et al. (2012) links physical activity with academic performance, with the authors concluding that "according to the best-evidence synthesis, we found strong evidence of a significant positive relationship between physical activity and academic performance. The findings of one high-quality intervention study and one high-quality observational study suggest that being more physically active is positively related to improved academic performance in children."

Physical Activity and Health Outcomes

According to the Physical Activity Guidelines Advisory Committee (2018), regular physical activity:

- helps build and maintain healthy bones and muscles;
- helps reduce the risk of developing obesity and chronic diseases, such as diabetes, cardiovascular disease, and colon cancer; and
- reduces feelings of depression and anxiety and promotes psychological health.

Long-term consequences of physical inactivity include:

- being overweight and obese, which are influenced by physical inactivity and poor diet and can increase one's risk for diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status; and
- increased risk for premature death, death by heart disease, development of diabetes, colon cancer, and high blood pressure (Physical Activity Guidelines Advisory Committee, 2018).

The figure here (U.S. Department of Health and Human Services, 2018) shows the relationship between moderate-to-vigorous physical activity and sitting time and the impact of this relationship on the risk of all-cause mortality in adults.

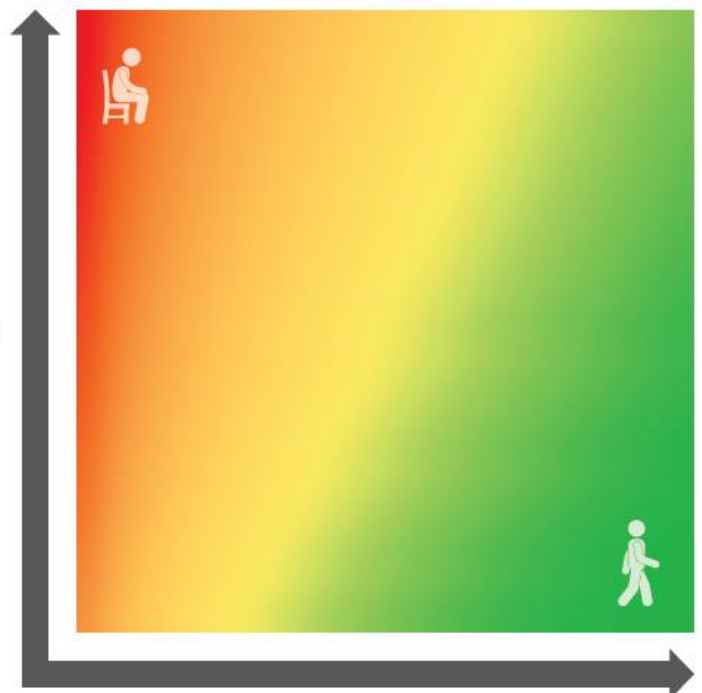


Photo provided by Elizabethton City Schools



Photo provided by Hamblen County Schools

Daily
Sitting
Time

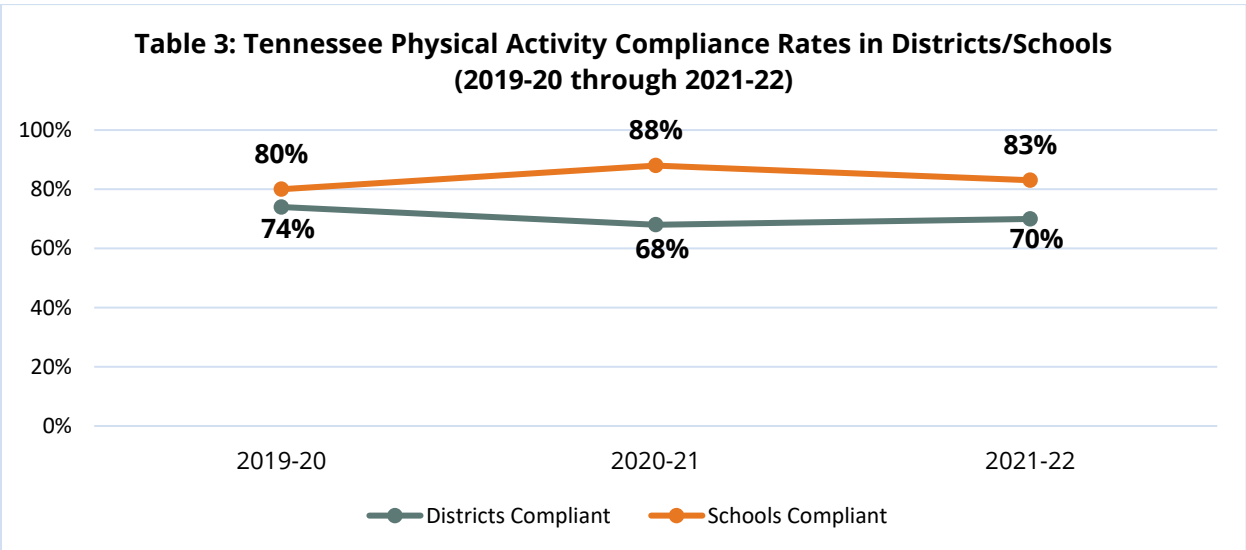


Moderate-to-Vigorous Physical Activity

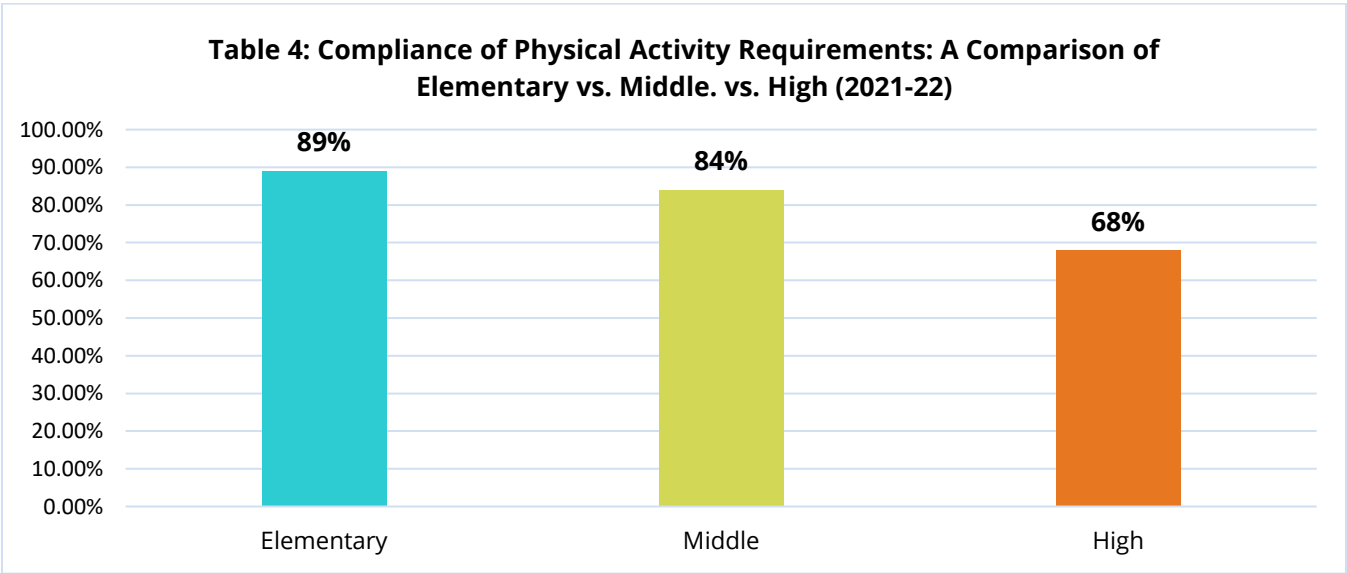
Risk of all-cause mortality decreases as one moves from red to green.

Tennessee 2021-22 Physical Activity/Physical Education Data

Tennessee Physical Activity and Physical Education Compliance Rates in Schools



During the 2021-22 school year, **96** school systems (**70 percent**) in Tennessee districts, according to district school health coordinators, were in compliance with the minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a). This total has **increased** from **68 percent** in 2020-21. (Tennessee Department of Education, 2022b). Although the number of complete districts in compliance has increased, the number of individual schools in compliance with the minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a) has decreased from **88 percent to 83 percent** (Tennessee Department of Education, 2022b). Table 3 shows the compliance rate trend data for both districts and schools over the last three school years.

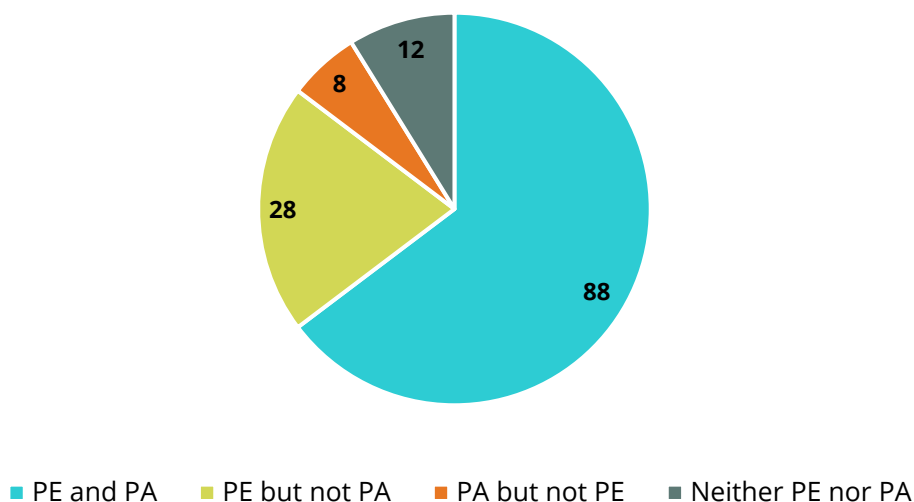




The minimum physical activity requirements outlined in T.C.A. § 49-6-1021(a) include 130 minutes a week for elementary students, 90 minutes for middle school students, and 90 minutes for high school students. Table 4 illustrates a comparison of each respective school category meeting the physical activity requirement for all students. Elementary schools are meeting the requirements at the highest rate, **89 percent**, even though they require the most time. **84 percent** of middle schools and **68 percent** of high schools are meeting their minimum weekly physical activity requirements with all students. (Tennessee Department of Education, 2022b).

Photo provided by Hamblen County Schools

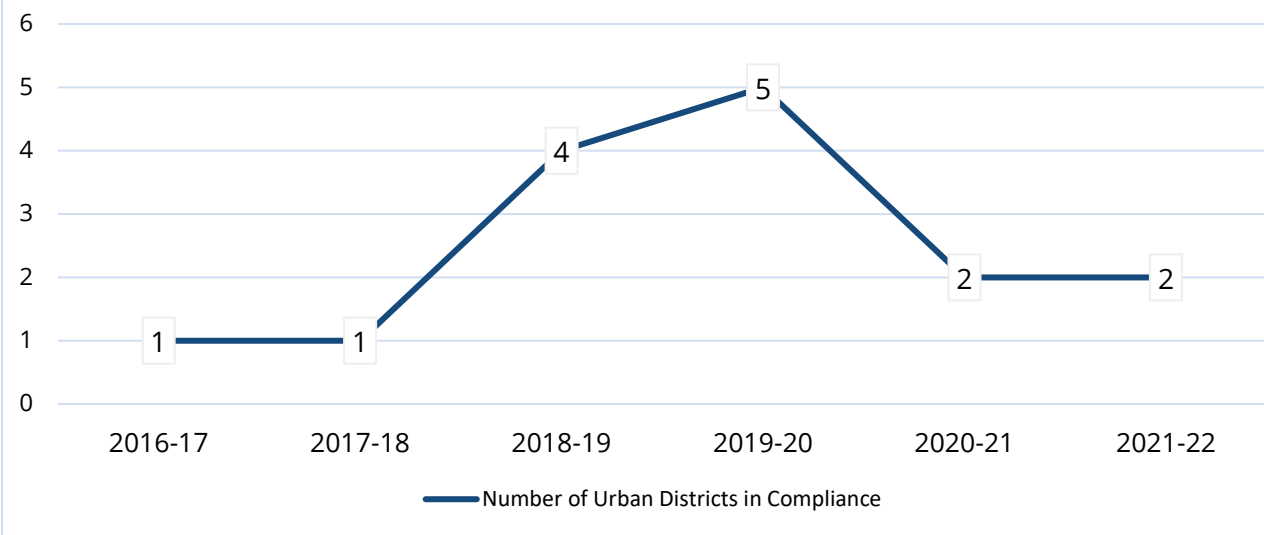
Table 5: T.C.A. § 49-6-1021 Physical Activity and Physical Education Compliance Rates in Districts (2021-22)



The Tom Cronan Act went into effect on July 1, 2020, and brought the implementation of specific minimum frequency, duration, and qualification standards for elementary physical education instruction for the first time. All students must be required to participate in physical education at least twice a week, for at least 60 minutes cumulative. This class must also be taught by a licensed educator with an appropriate endorsement in physical education. Because of this change, the definition of compliance with T.C.A. § 49-6-1021 is multifaceted, requiring districts to support its schools and educators individually and in a variety of ways. Table 5 shows the district compliance rates for both the physical activity (PA) and physical education (PE) components of T.C.A. § 49-6-1021. Districts reporting full compliance with both the physical activity and physical education requirements has increased from **56 percent to 65 percent**. About **9 percent** of districts report full non-compliance. (Tennessee Department of Education, 2022b).

Tennessee Physical Activity Compliance Rates Among Urban School Districts

Table 6: Number of Urban Districts in Compliance with T.C.A. § 49-6-1021(a)



Among Tennessee’s eight urban school districts (districts serving 25,000 or more students), the reported rate of compliance with T.C.A. § 49-6-1021(a) is **25 percent** for the 2021-22 school year. **Two** out of **eight** urban school districts reported 100 percent compliance for all schools in their district. The eight urban school districts include Hamilton County Schools, Knox County Schools, Metropolitan Nashville Public Schools, Clarksville-Montgomery County School System, Rutherford County Schools, Memphis-Shelby County Schools, Sumner County Schools, and Williamson County Schools. Table 6 indicates the change of compliance among these districts over time.



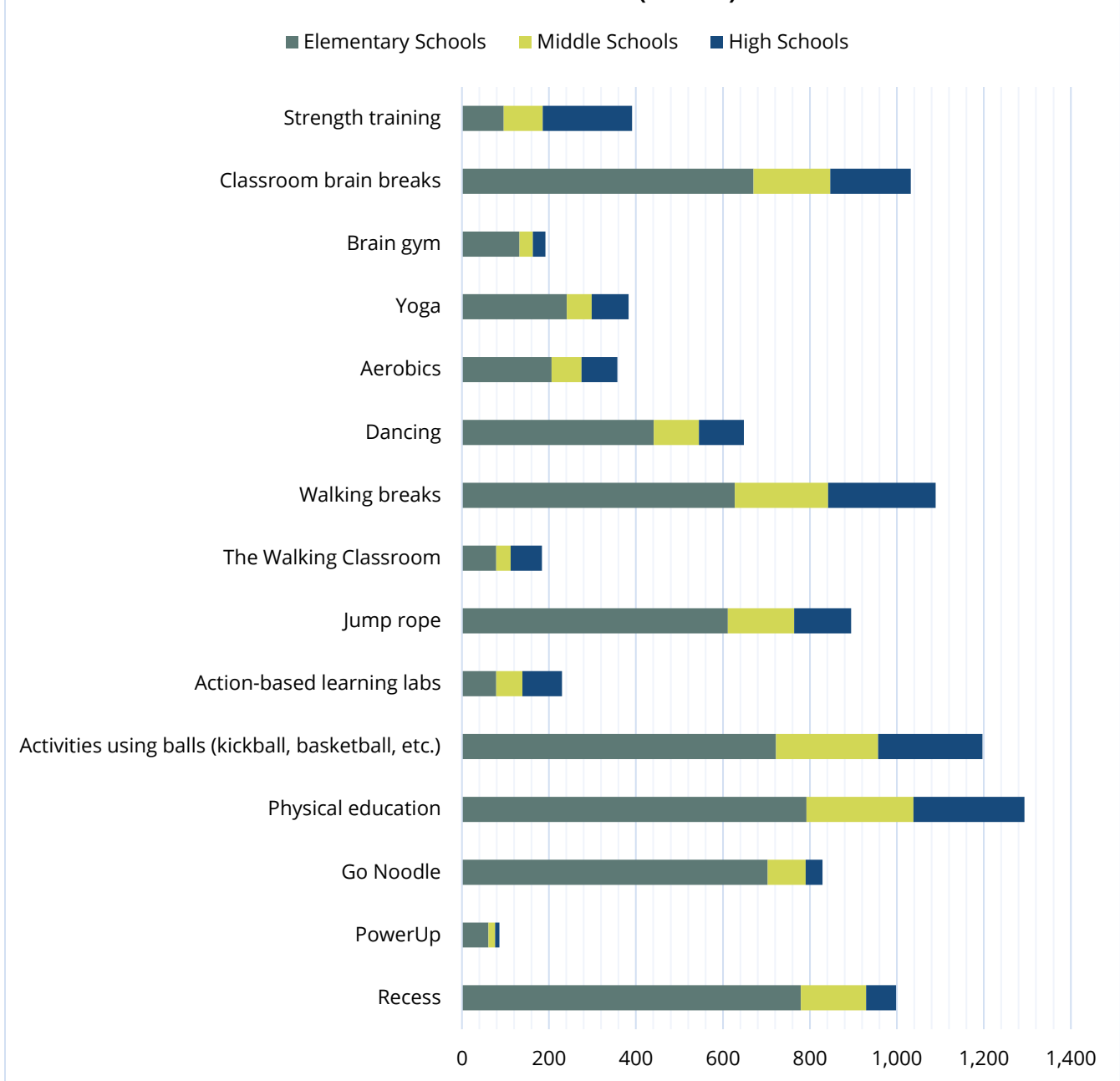
Photo provided by Hamblen County Schools



Photo provided by Sequatchie County Schools

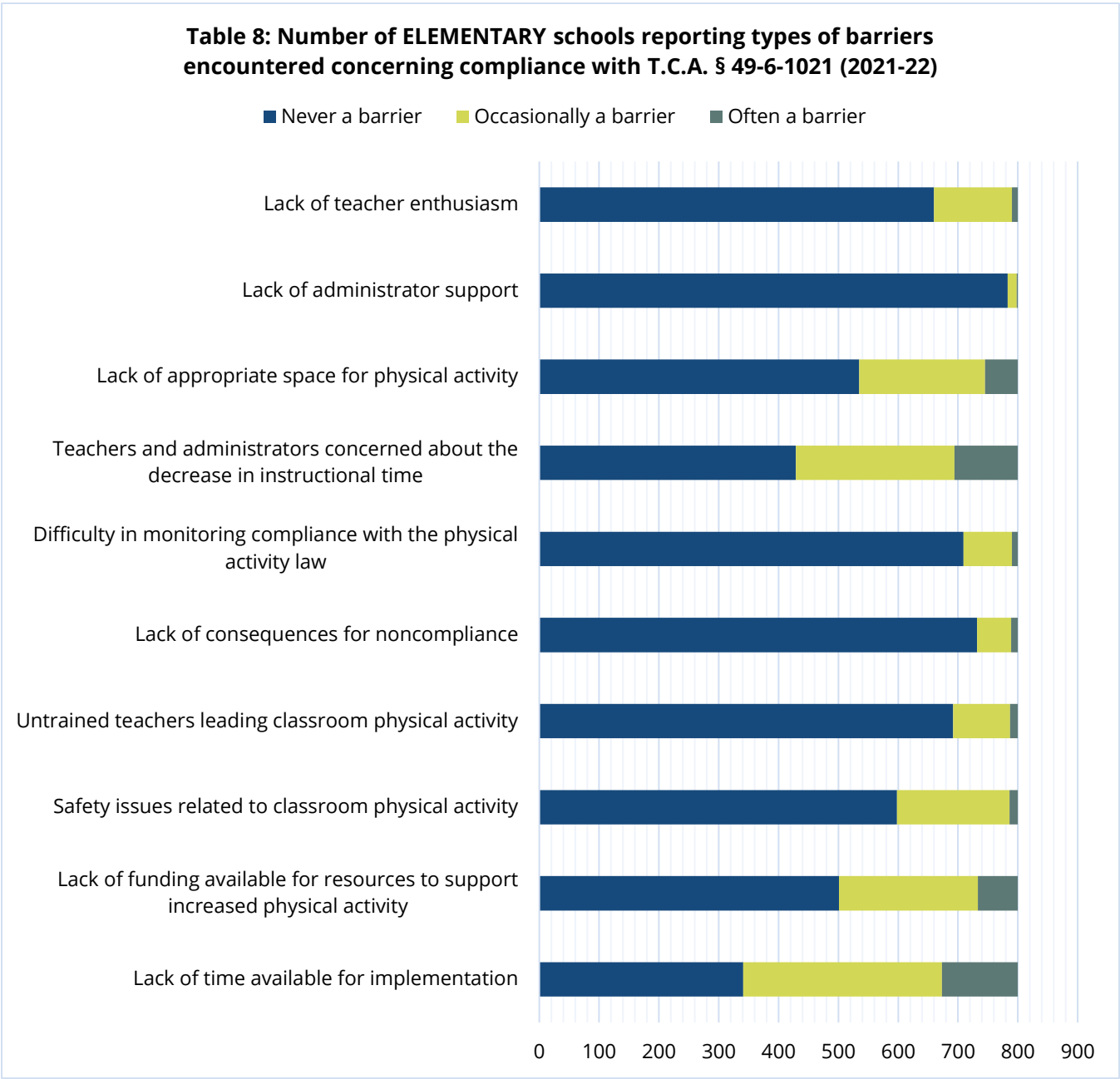
Types of Physical Activities Used in Schools to Meet Physical Activity Requirement

Table 7: Number of schools implementing activities to facilitate compliance with T.C.A. § 49-6-1021 (2021-22)



The most prevalent types of activities schools used to meet the requirements of T.C.A. § 49-6-1021 were physical education (**98 percent** of reporting schools), activities using balls (**91 percent** of reporting schools), and walking breaks (**82 percent** of reporting schools) (Tennessee Department of Education, 2022c).

Reported Barriers Inhibiting Compliance with T.C.A. § 49-6-1021 by Type of School

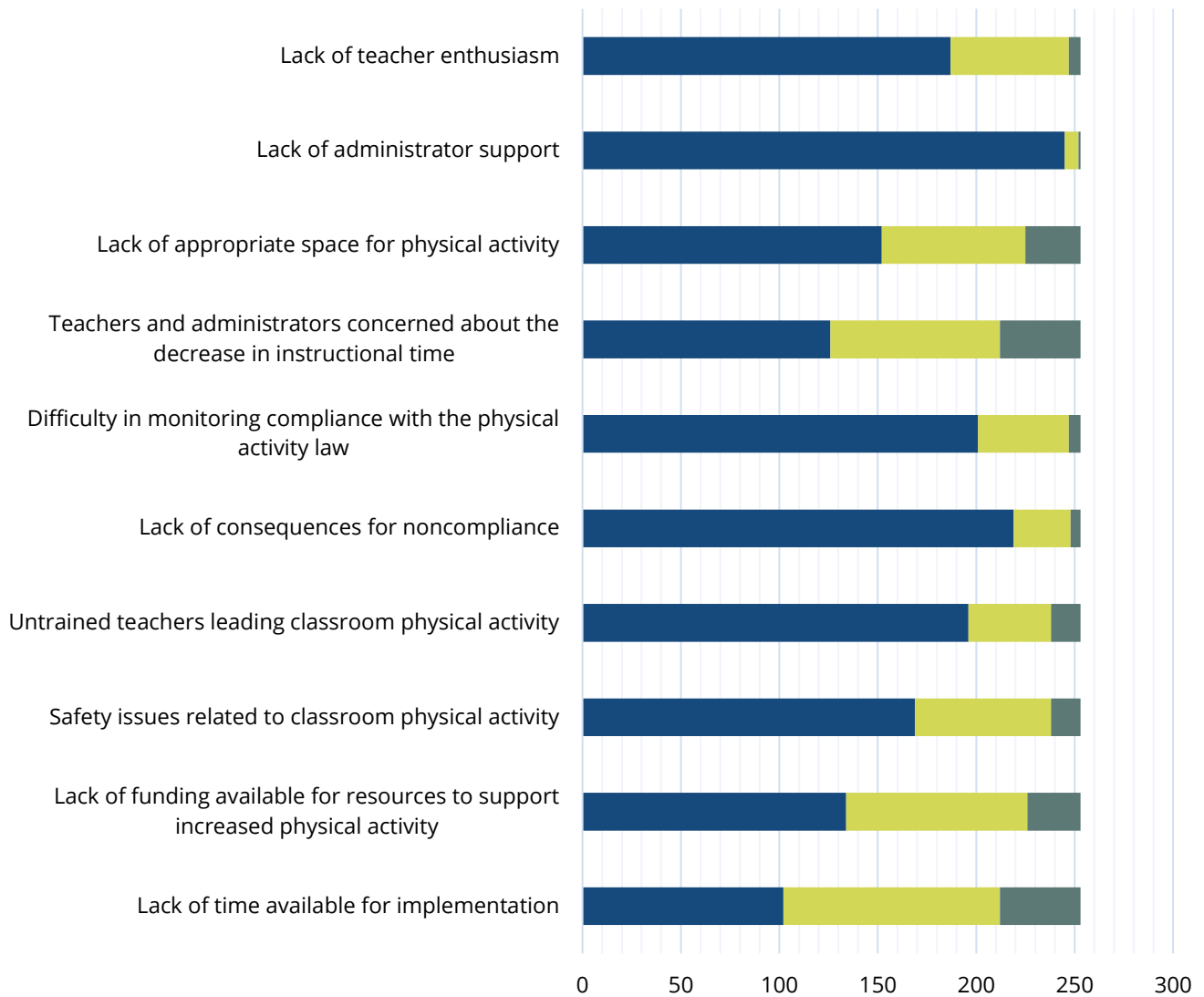


Elementary School Barriers

The most often cited barrier to implementing physical activity in elementary schools is lack of time available for implementation (**57 percent** of all reporting elementary schools), followed by teachers/administrators concerned about decreased academic time (**46 percent** of all reporting elementary schools), and lack of funding available for resources to support increased physical activity (**37 percent** of all reporting elementary schools) (Tennessee Department of Education, 2022c).

Table 9: Number of MIDDLE schools reporting types of barriers encountered concerning compliance with T.C.A. § 49-6-1021 (2021-22)

■ Never a barrier ■ Occasionally a barrier ■ Often a barrier

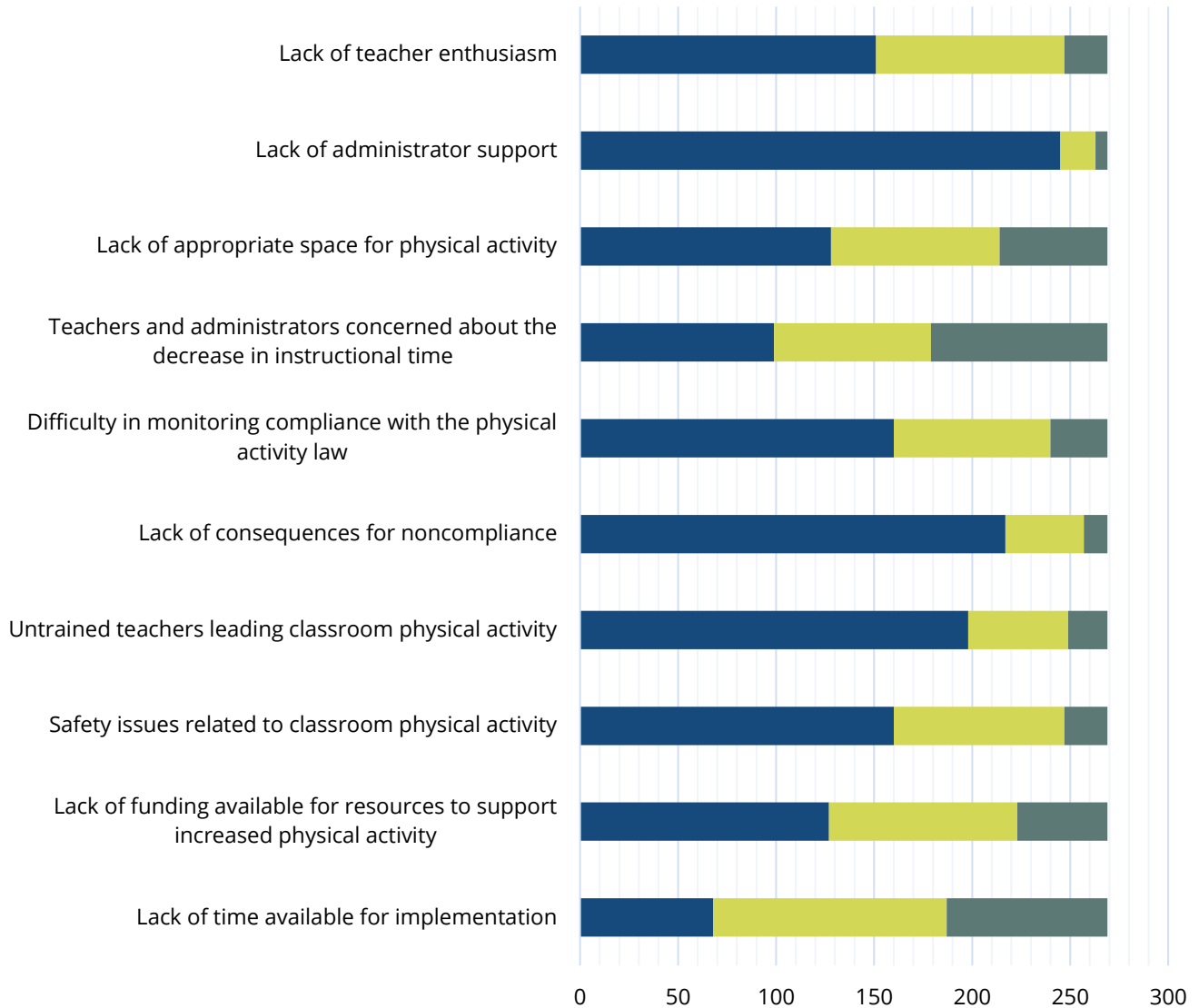


Middle School Barriers

The most often cited barrier to implementing physical activity in middle schools is lack of time available for implementation (**60 percent** of all reporting middle schools), followed by teachers/administrators concerned about decreased academic time (**50 percent** of all reporting middle schools), and lack of funding available for resources to support increased physical activity (**47 percent** of all reporting middle schools) (Tennessee Department of Education, 2022c).

Table 10: Number of HIGH schools reporting types of barriers encountered concerning compliance with T.C.A. § 49-6-1021 (2021-22)

■ Never a barrier ■ Occasionally a barrier ■ Often a barrier

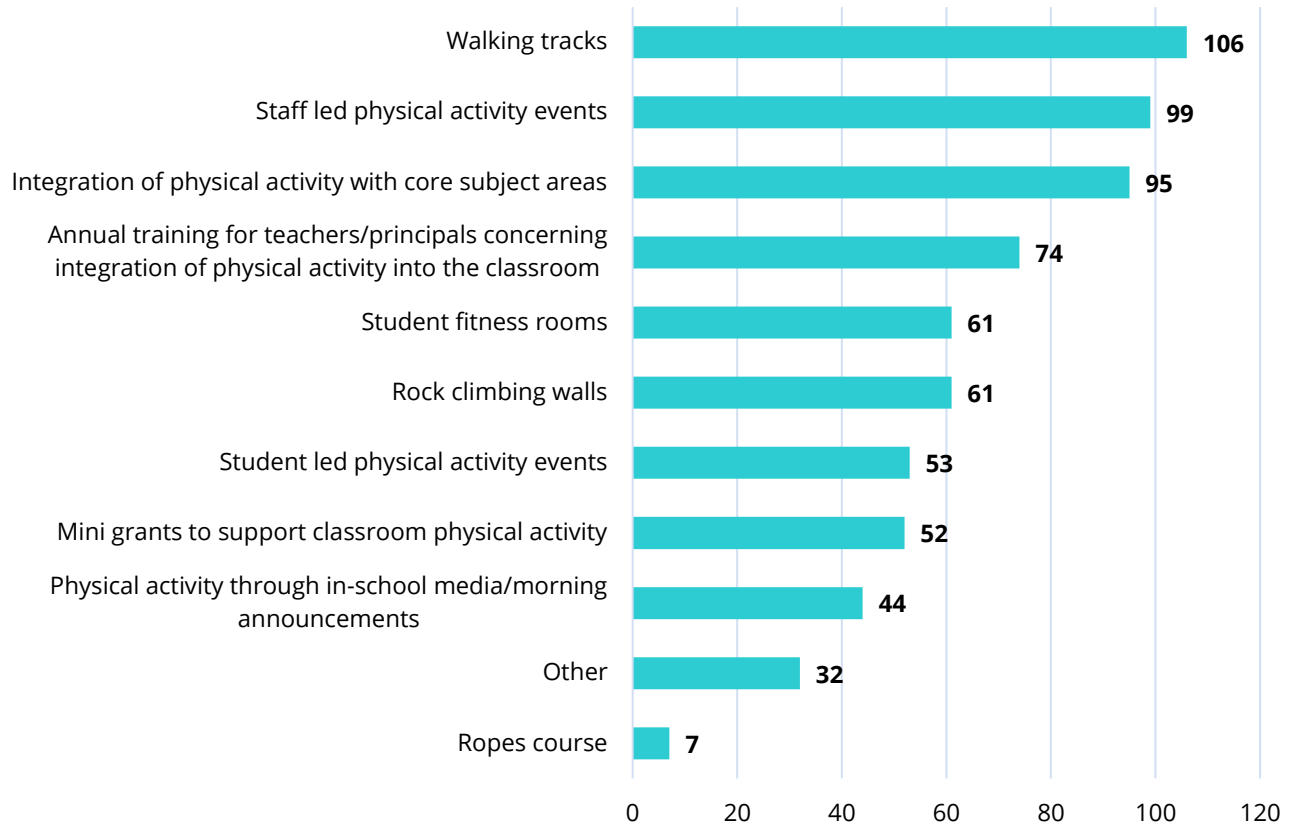


High School Barriers

The most often cited barrier to implementing physical activity in high schools is lack of time available for implementation (**75 percent** of all reporting high schools), teachers and administrators concerned about decreased academic (**63 percent** of all reporting high schools), and lack of funding available for resources to support increased physical activity (**53 percent** of all reporting high schools) (Tennessee Department of Education, 2022c).

Innovative Methods Districts Use to Comply with the Physical Activity Requirement

Table 11: Innovative Methods Schools Use to Comply with T.C.A. § 49-6-1021



During the 2021-22 school year (Tennessee Department of Education, 2022b), the most common types of innovative methods used by school systems to ensure compliance with T.C.A. § 49-6-1021 were use of walking tracks (**106** school districts), staff led physical activity events (**99** school districts), and integration of physical activity with core subject areas (**95** school districts).



Photo provided by Anderson County Schools

Using or Denying Physical Activity, Physical Education, or Recess as Punishment

Tennessee State Board of Education Policy 4.206 states that physical activity shall not be withheld from a student as a punishment (Tennessee State Board of Education, 2020). Examples of inappropriate use of physical activity include:

- withholding physical education class or recess time for students to complete unfinished schoolwork or as a consequence for misbehavior;
- forcing students to run laps or perform push-ups because of behavioral infractions (e.g., showing up late, talking, or disruptive behavior); or
- threatening students with physical activity or no physical activity (e.g., no recess, no game time), and then removing the threat because of good behavior (SHAPE America, 2021).

Administering or withholding physical activity as a form of punishment and/or behavior management is inappropriate and constitutes an unsound education practice. Meaningful engagement in physical activity is an essential aspect of physical education and sport. Building a sense of competence, advocating the joy of physical activity, and moving, expanding movement and motor skills, and developing fitness levels are among the numerous practices that support appropriate behavior and the development of positive attitudes toward physical activity (SHAPE America, 2021).

While some people believe that physical activity used as punishment and/or a behavior-management tool is effective, experts perceive this practice as a “quick fix” that might discourage the behavior it is intended to elicit. Using negative consequences to alter behavior suppresses the undesirable behavior only while the threat of punishment is present; it does not teach self-discipline or address the actual behavior problem. Therefore, student behavior patterns are not changed (Weinberg & Gould, 2007).

A student's motivation for being physically active by engaging in the important subject matter content of physical education and sport should never fall victim to the inappropriate use of physical activity as a disciplinary consequence.
–SHAPE America

Resources are available for alternatives to withholding recess as punishment from the CDC, Springboard to Active Schools, and the Alliance for a Healthier Generation. Suitable alternatives to using or withholding physical activity as punishment are (SHAPE America, 2021):

- including students in establishing expectations and outcomes early in the year and review those expectations and outcomes frequently,
- including students in meaningful discussions about goals and how to reach them,
- being consistent with enforcing behavioral expectations within the learning environment,
- practicing and rewarding compliance with rules and outcomes,
- offer positive feedback and catch students doing things right,
- avoiding reinforcing negative behavior by drawing attention to it,
- holding students accountable for misbehavior,
- developing efficient routines that keep students involved in learning tasks, and
- waiting for students to be attentive before providing directions.

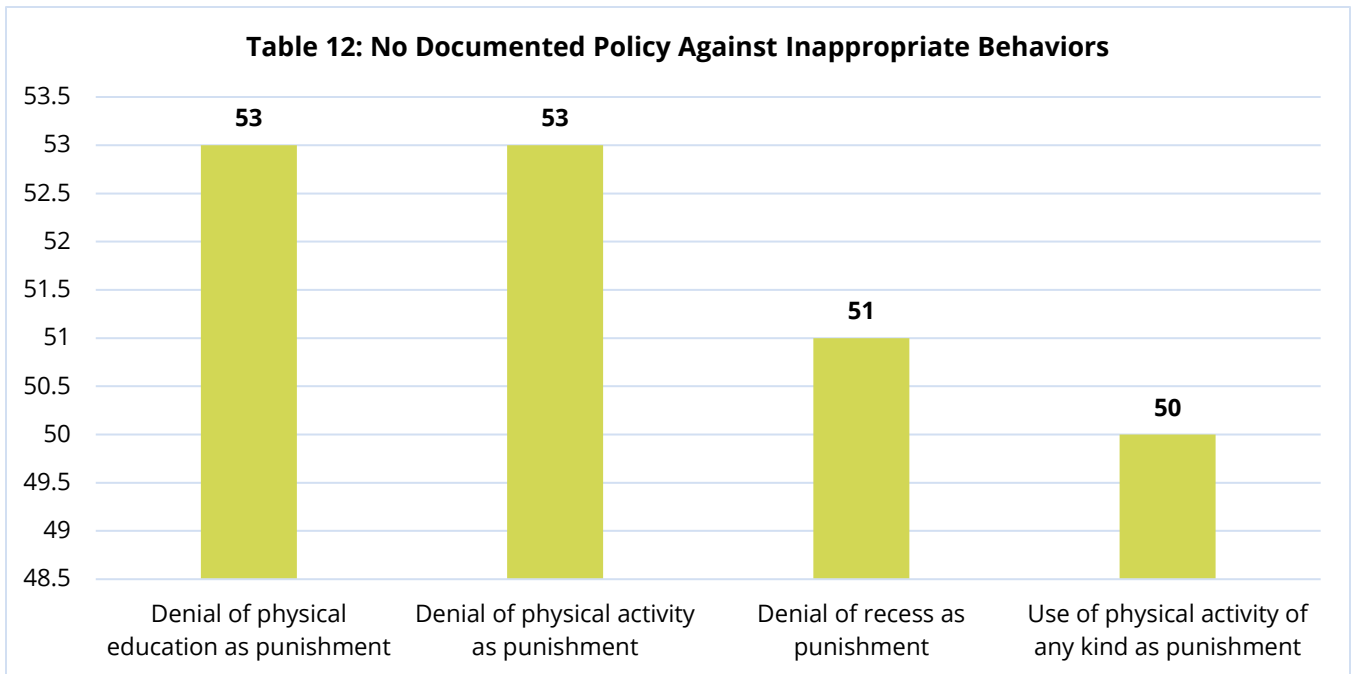


Table 12 shows the number of school districts that do not have a documented policy against specific inappropriate behaviors (Tennessee Department of Education, 2022b).

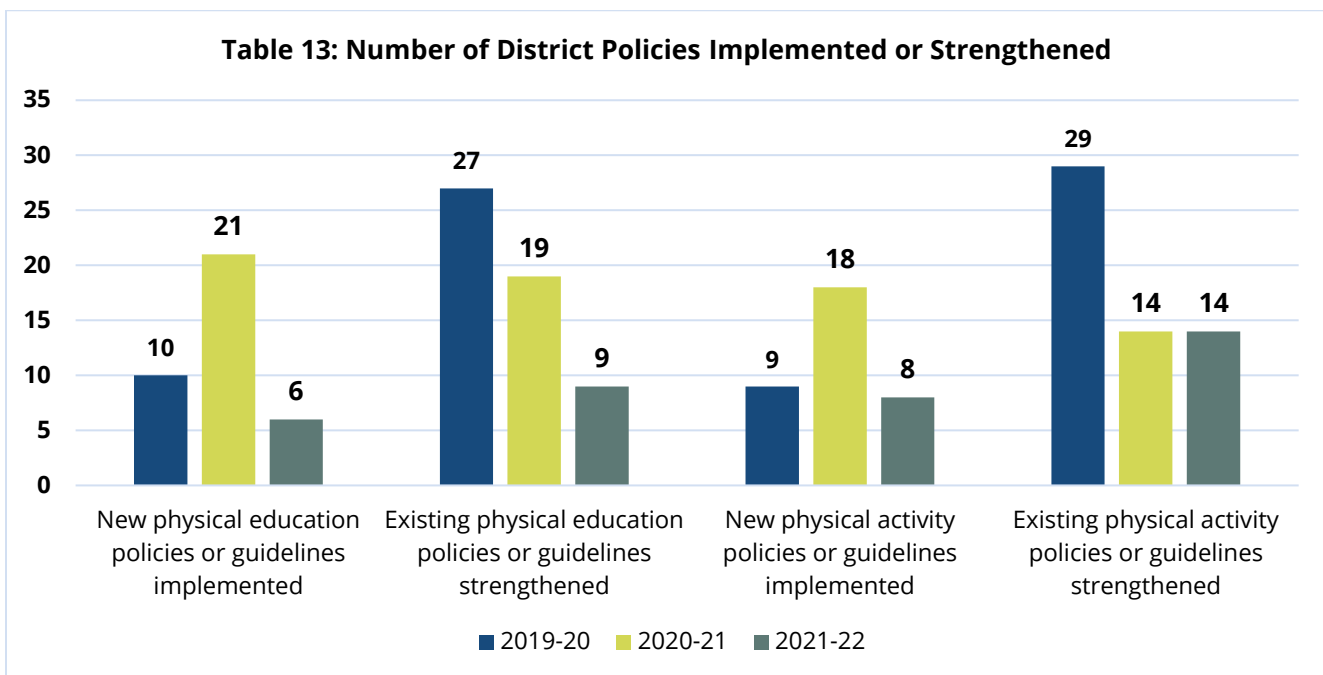
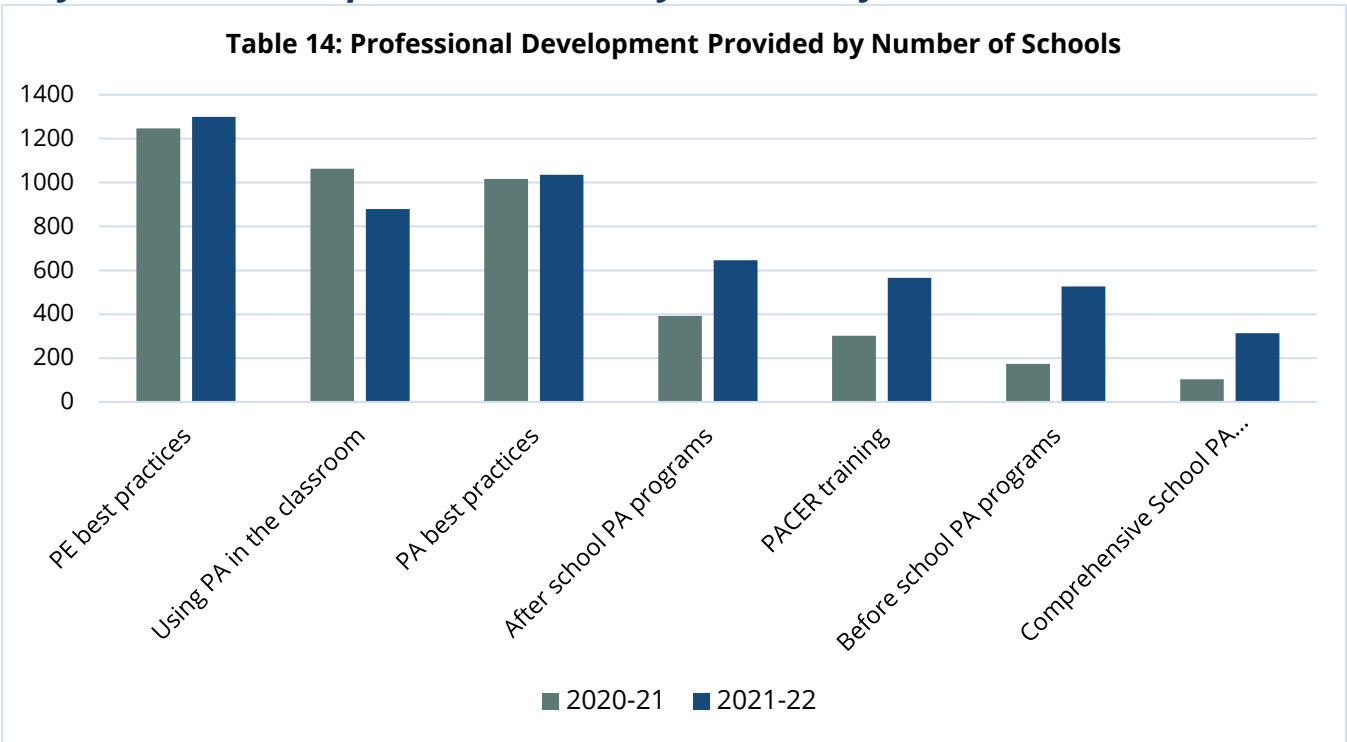


Table 13 represents data on the number of district-wide policies implemented or strengthened in the 2021-22 school year (Tennessee Department of Education, 2022b).

Professional Development Provided by Number of Schools



During the 2021-22 school year (Tennessee Department of Education, 2022b), school health coordinators worked to support a physically active school climate by providing relevant professional development to staff. Table 14 represents professional development provided by number of schools. Overall, more schools received professional development related to physical education and physical activity compared to the 2020-21 school year.



Photo provided by Macon County Schools



Photo provided by Stewart County Schools

Physical Education in Tennessee – Survey Responses

In compliance with T.C.A. § 49-6-1021, the department worked with the American Heart Association to develop a survey to generate data on physical education in Tennessee. The survey was sent to the lead physical education teacher in each school in October 2021. Of the 1,601 schools where physical education teachers received the survey, 1,194 completed the questionnaire for an overall response rate of **75 percent**. The following data is based on these survey results from the 2021-22 school year.

Success to reinforce (Tennessee Department of Education, 2022d):

- **43 percent** of Tennessee physical education teachers report their schools have physical activity clubs. This represents a **2 percent increase** from the 2020-21 school year, hopefully indicating a return to extracurricular opportunities outside interscholastic athletic programs.
- **77 percent** of Tennessee physical education teachers report that their schools incorporate classroom physical activity breaks.
- **88 percent** of Tennessee physical education teachers report that on average, their students are moderately-to-vigorously active at least 50% of class time. This is a best practice for physical education instruction.

Opportunities for continued improvement (Tennessee Department of Education, 2022d):

- **26 percent** of Tennessee physical education teachers stated that students were withheld from physical education class for academic remediation, to prepare for other classes, or standardized tests.
- **8 percent** of Tennessee physical education teachers stated that when in-person, most of the time, they do not have adequate space for all students to safely and simultaneously participate in physical education class.
- **12 percent** of Tennessee physical education teachers stated that teachers or administrators withheld physical activity as punishment.
- **9 percent** of Tennessee physical education teachers stated that they spend six hours or more of an instructional week being utilized in other ways than teaching physical education, including but not limited to RTI, assisting classroom teachers with academics, tutoring, lunch duty, and bus duty. This value represents a **1 percent improvement** from the 2020-21 school year.
- **33 percent** of Tennessee physical educators do not use a published, planned sequential physical education curriculum. These programs either do not use a curriculum, or use a self-designed curriculum. While there is nothing wrong with a self-designed curriculum, these should still be reviewed using the CDC's Physical Education Curriculum Analysis Tool (PECAT) for rigor, accuracy, standards alignment, and other elements.

Physical Activity and Physical Education in Tennessee – Priority Health Behaviors

CDC Youth Risk Behavior Survey

The Centers for Disease Control and Prevention deemed it necessary to reschedule the spring administration of the 2021 Youth Risk Behavior Survey due to the COVID-19 pandemic. The survey could not be administered because, as a nation, so many schools were not in person. This has postponed getting results of the YRBS until late 2022.

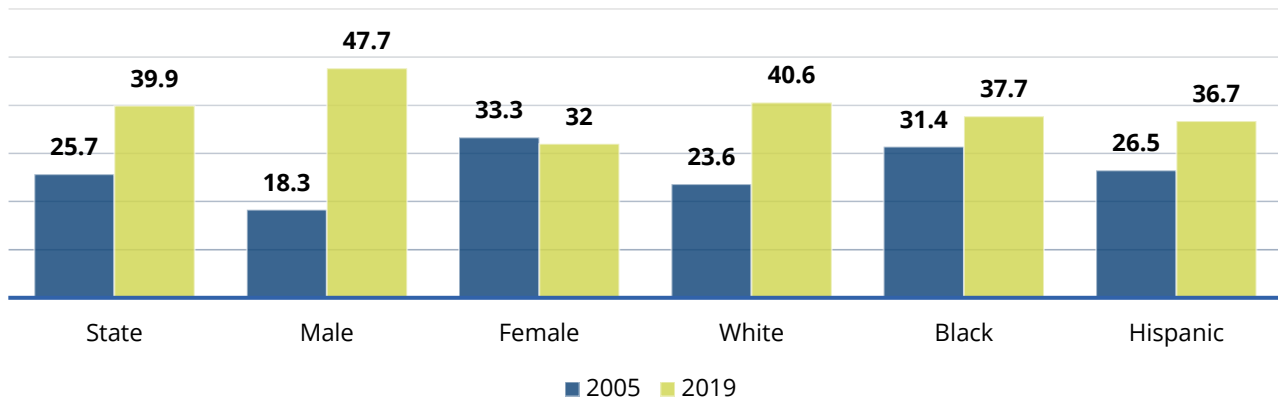
In 1991, the CDC developed the Youth Risk Behavior Surveillance (YRBS) survey, a national survey system to monitor the prevalence of youth behavior that most influences health. The priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the United States include tobacco use, unhealthy dietary behaviors, inadequate physical activity, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases including HIV infection, and behaviors that contribute to unintentional injuries and violence.

High school students self-reported the following weighted YRBS data related to physical activity. The Tennessee-specific data is detailed in Tables 15-19, below (CDC, 2020b):

- Table 15: Percentage of high school students who were physically active for a total of at least 60 minutes per day on **five of the past seven** days.
- Table 16: Percentage of students who attended physical education (PE) classes **daily** in an average week when they were in school.
- Table 17: Percentage of high school students who attended physical education (PE) classes on **one or more days** in an average week.
- Table 18: Percentage of students who played video or computer games or used a computer for something that was not schoolwork three or more hours a day in an average school day.
- Table 19: A Side-by-Side Comparison of screen time and meeting daily physical activity recommendations.

(Note that Hispanic data was collected during CDC's 2007 YRBS survey administration.)

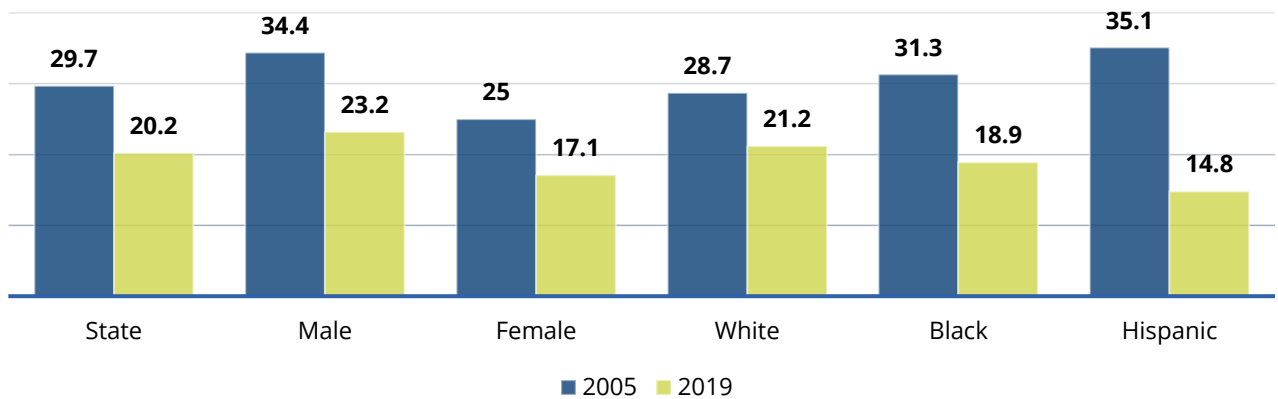
Table 15: Percentage of Tennessee high school students who were physically active for a total of at least 60 minutes per day on five of the past seven days



Between 2005 and 2019, the percentage of Tennessee high school students who reported being physically active for a total of at least 60 minutes per day on five of the past seven days increased from **25.7 percent** to **39.9 percent**.

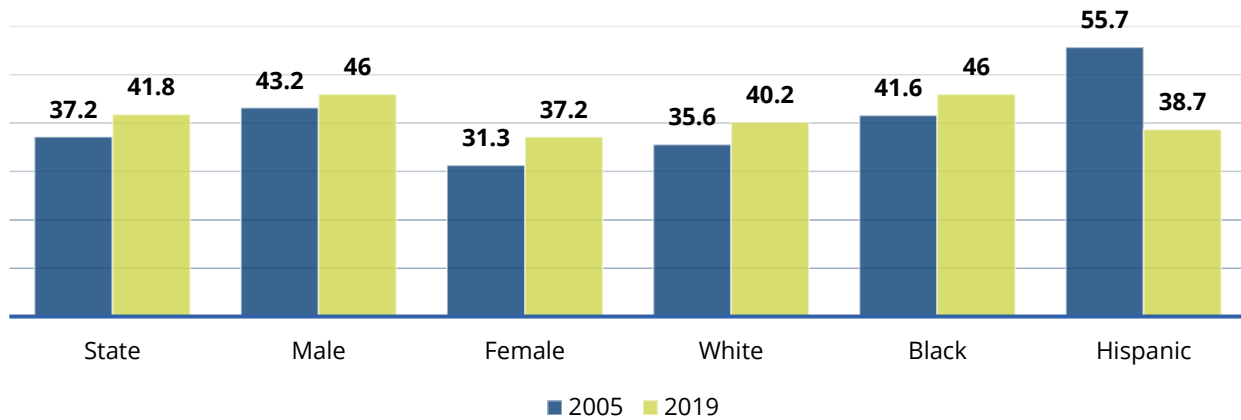
Male students reported a significantly higher regular rate of physical activity at **47.7 percent** compared to female who were at **32 percent**. White students reported the greatest amount of increase in this area increasing from **23.6 percent** in 2005 to **40.6 percent** in 2019. Both black and Hispanic students showed an increase on this measure from **31.4 percent** to **37.7 percent** and **26.5 percent** to **36.7 percent**, respectively.

Table 16: Percentage of Tennessee high school students who attended physical education (PE) classes daily in an average week



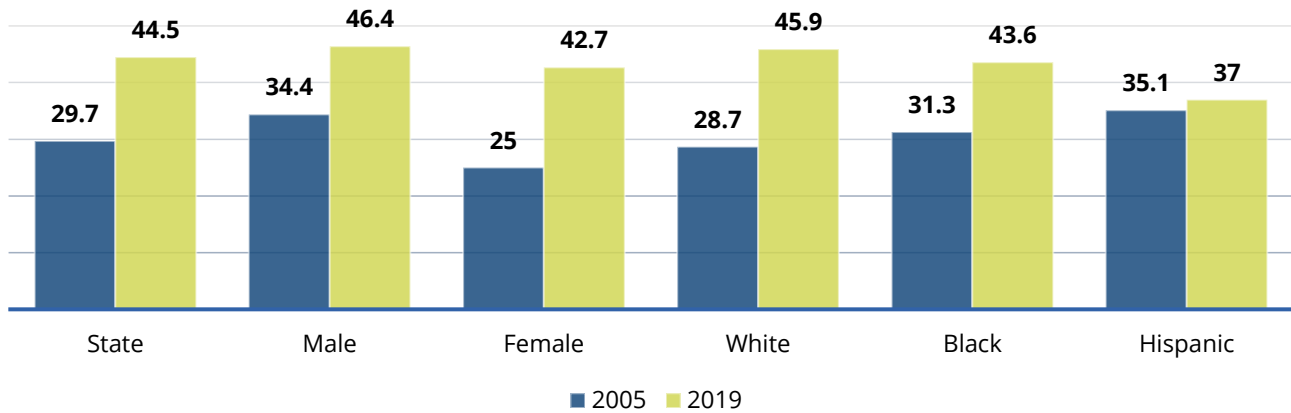
The rate of Tennessee students reporting they attended daily physical education classes in an average week declined from **29.7 percent** in 2005 to **20.2 percent** in 2019. The most significant decrease was reported by Hispanic students whose participation rate declined from **35.1 percent** in 2005 to **14.8 percent** in 2019. Black and white students also had a decrease in this area from **31.3 percent** to **18.9 percent** and **28.7 percent** to **21.2 percent**, respectively.

Table 17: Percentage of Tennessee high school students who attended physical education (PE) classes on one or more days in an average week



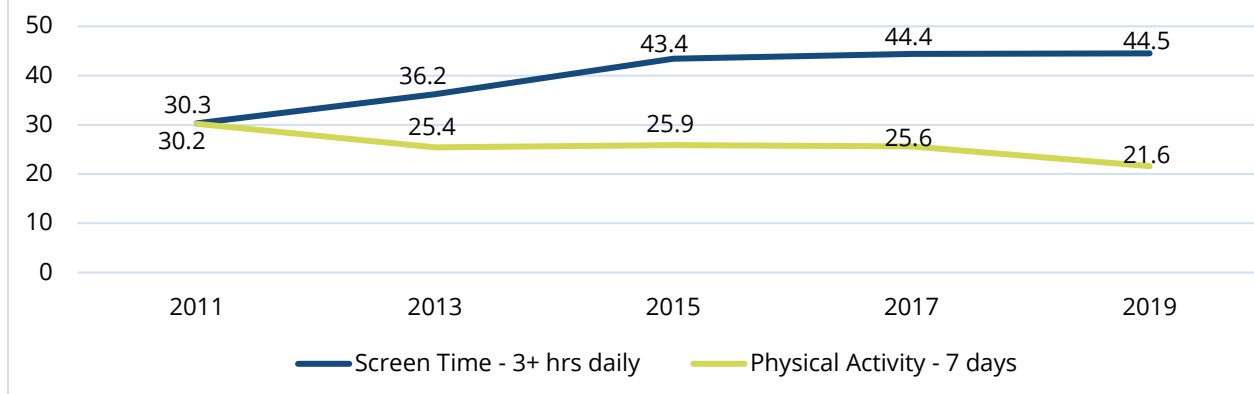
Since 2005, the percentage of high school students reporting they attended physical education classes on one or more days in an average week when in school increased from **37.2 percent** in 2005 to **41.8 percent** in 2019. Male students reported attending classes more than female students; however, female students have increased in this area by **5.9 percent** since 2005. Black students have the highest percentage of participation over Hispanic and white students at **46 percent**.

Table 18: Percentage of Tennessee high school students who played video or computer games or used a computer for something that was not schoolwork three or more hours per day



The percentage of Tennessee high school students who played video or computer games or used a computer for something not related to schoolwork for three or more hours a day in an average school day increased from **29.7 percent** in 2005 to **44.5 percent** in 2019. Male students (**46.4 percent**) were slightly more likely to be engaged in this activity compared to female students (**42.7 percent**). Black students (**43.6 percent**) and Hispanic students (**37 percent**) reported lower rates than white students (**45.9 percent**). This behavior has had an upward trend across all races and both sexes since 2005, suggesting that Tennessee students are increasing the amount of screen time daily.

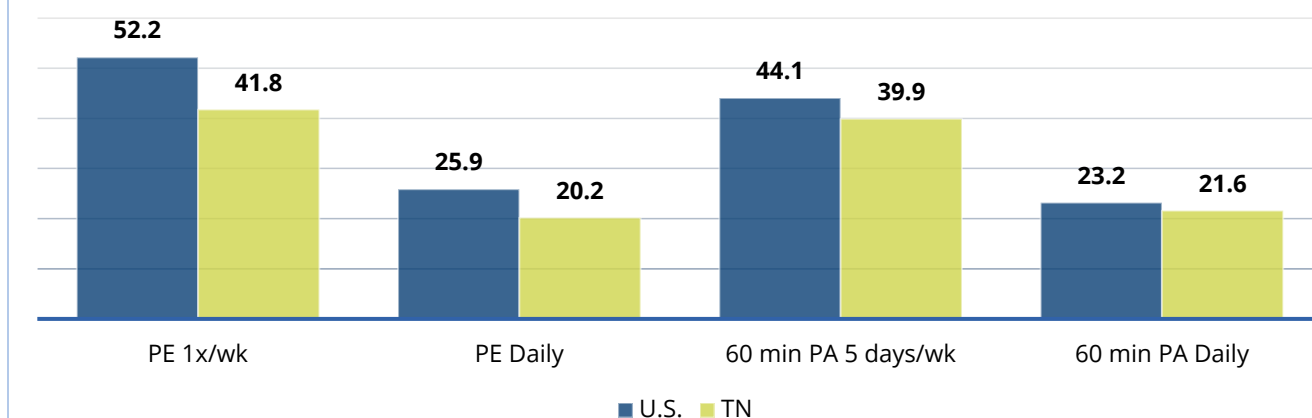
Table 19: Screen time and Meeting Daily Physical Activity Recommendations: A Side-by-Side Comparison



Engaging in high quantities of screen time (3+ hours daily) is a health risk behavior that is showing a positive trend among Tennessee students since the question was included in 2011, represented on Table 19 by percentage of students. Conversely, the percentage of students meeting the recommended amount of physical activity daily over the course of seven days has decreased since that time.

Tennessee and the Nation

Table 20: Physical Education and Physical Activity Participation: Tennessee and the Nation (2019)



Tennessee is a diverse state within a diverse nation. A comparison of behaviors related to positive health outcomes shows Tennessee below the national average in all categories (CDC, 2020b). Tennessee students participating in physical education once during the last week was reported at **41.8 percent**, compared to **52.2 percent** nationally. **44.1 percent** of average American high school students met the recommended daily amount of physical activity time of 60 minutes on at least five days during the previous week, compared to **39.9 percent** in Tennessee.

Tennessee requires 0.5 high school credits in physical education for graduation. There is also a 1 credit graduation requirement for a Lifetime Wellness course, but this course has its own set of standards and is not considered a physical education class. In the 2016 Shape of the Nation Report, more than half the nation (30 states) require 1 credit or more of physical education for high school students to graduate. Some of these credit totals represent a cumulative total of annual requirements.

U.S. Physical Education Graduation Requirements: State Totals

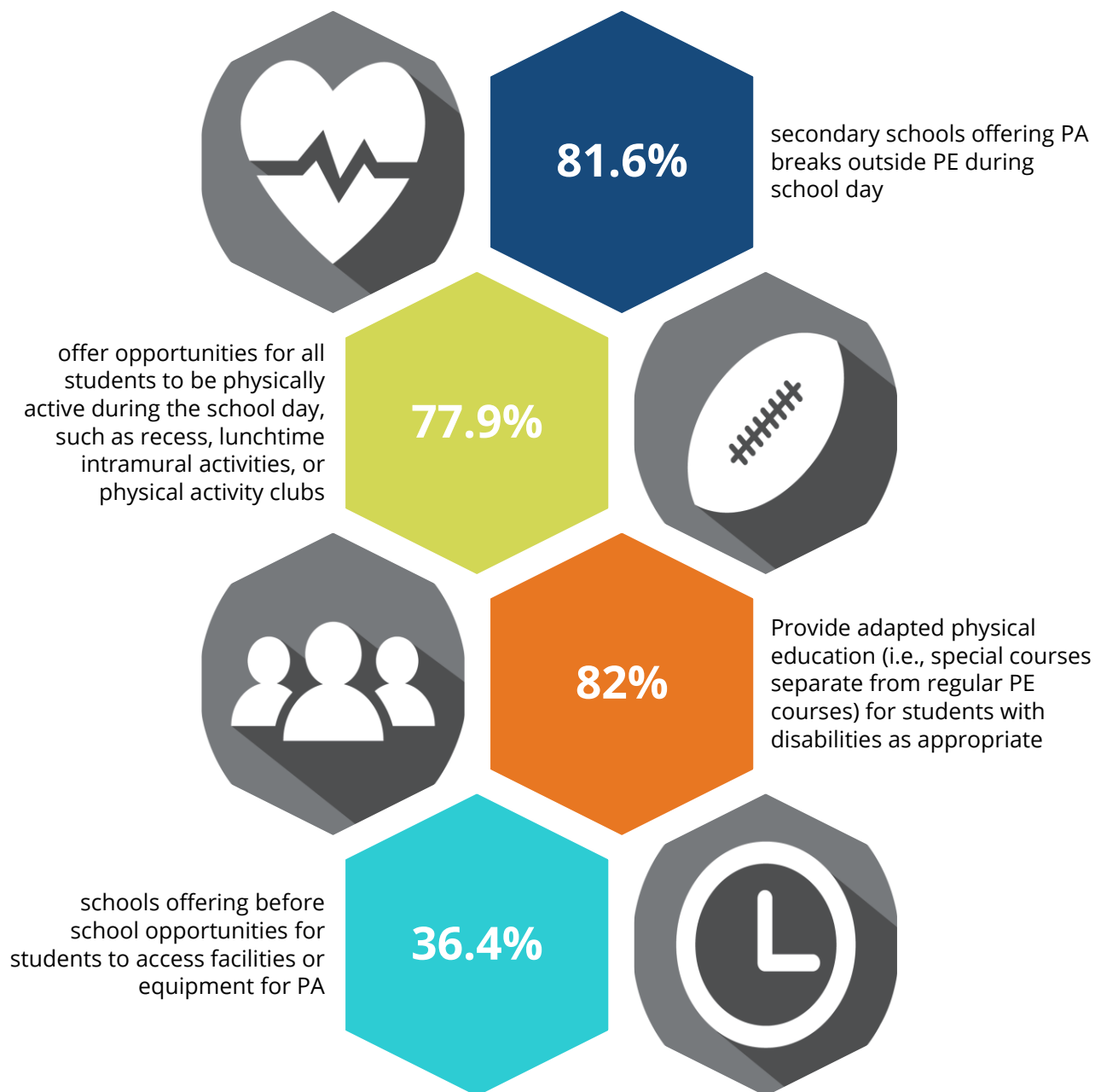
2.0 or more	6
1.5	5
1.0	19
0.5	9
No Requirement	11



Photo provided by Anderson County Schools

CDC School Health Profiles Survey

CDC's *School Health Profiles* is a system of surveys assessing school health policies and practices in states, territories, and large urban school districts. *Profiles* surveys are conducted biennially among representative samples of middle and high school principals and lead health education teachers. The following selected data is from the 2020 Tennessee survey results (CDC, 2020a).



Summary and Recommendations

Schools play a pivotal role in their capacity to support the development of life-long habits of physical activity behaviors among their students. By developing and implementing physical activity policies and practices for students, schools can create environments supportive of not only the development of healthy American adults but also increase student academic outcomes. Therefore, CSH coordinators, teachers, coaches, school administrators, and school district officials need to take a leadership role in implementing the following guidelines in Tennessee schools.

Comprehensive School Physical Activity Program

The CDC's Comprehensive School Physical Activity Program (CSPAP) is a framework for planning and organizing activities for school physical education and physical activity. The goal of a CSPAP is to increase physical activity opportunities before, during, and after school and to increase students' overall physical activity and health. Healthy and physically active students tend to have better grades, school attendance, cognitive performance (memory), and classroom behaviors (on-task behavior) (CDC, 2019).

The framework complements the coordinated school health model and is meant to be a strategic tool to address the aspect of physical education and physical activity in an integrated and ecological way. Schools can use the CDC's *Comprehensive School Physical Activity Programs: A Guide for Schools* to engage in a step-by-step process to develop, implement, and evaluate a CSPAP. This process helps schools develop a yearly plan for physical education and physical activity that they can implement and evaluate. In addition, the CSPAP framework—as a whole or as individual components—can be included in local wellness policies and school improvement plans to further support and provide guidance on school physical education and physical activity policies and practices (CDC, 2019).



Active Students = Better Learners

www.cdc.gov/healthyschools/PEandPA

References

- Centers for Disease Control and Prevention. (2010). The association between school-based physical activity, including physical education, and academic performance. Atlanta, GA: U.S. Department of Health and Human Services.
- Centers for Disease Control and Prevention (CDC). (2019). Increasing Physical Education and Physical Activity: A framework for schools. Atlanta, GA: U.S. Department of Health and Human Services.
- Centers for Disease Control and Prevention (CDC). (2020). School health profile, Tennessee. Unpublished raw data.
- Centers for Disease Control and Prevention (CDC). (2020). Tennessee high school youth risk behavior survey data, 2005–2019. Retrieved August 24, 2020, from <http://www.cdc.gov/healthyyouth/yrbs/index.htm>.
- Centers for Disease Control and Prevention (CDC) and SHAPE America – Society of Health and Physical Educators. (2017). Strategies for recess in schools. Atlanta, GA: U.S. Department of Health and Human Services.
- Michael, S. L., Merlo, C. L., Basch, C. E., Wentzel, K. R., & Wechsler, H. (2015). Critical connections: health and academics. The Journal of school health, 85(11), 740–758. <https://doi.org/10.1111/josh.12309>
- Physical Activity Guidelines Advisory Committee. (2018). Physical activity guidelines advisory committee scientific report. Washington, DC: U.S. Department of Health and Human Services.
- SHAPE America – Society of Health and Physical Educators. (2015). The essential components of physical education. Reston, VA: SHAPE America.
- SHAPE America – Society of Health and Physical Educators. (2016). Shape of the Nation: Status of physical education in the USA
- Retrieved from https://www.shapeamerica.org/uploads/pdfs/son/Shape-of-the-Nation-2016_web.pdf
- SHAPE America – Society of Health and Physical Educators. (2019). The relationship between PE and PA.
- Retrieved from <https://www.shapeamerica.org/uploads/pdfs/2018/downloadables/pepa2.pdf>.

- SHAPE America – Society of Health and Physical Educators. (2021). Position statement: Physical activity should not be used as punishment and/or behavior management. Reston, VA: SHAPE America.
- Singh, A., Uijtdewilligen, L., Twisk, J.W, van Mechelen, W., & Chinapaw, M.J. (2012). Physical activity and performance at school: A systematic review of the literature including a methodological quality assessment. *Archives of Pediatrics and Adolescent Medicine*, 166(1).
- Tennessee Department of Education. (2021). Tennessee public schools: A summary of weight status data, 2019-20. Nashville, TN: Tennessee Department of Education, Coordinated School Health.
- Tennessee Department of Education. (2022). Annual coordinated school health school district applications, 2007-08 through 2021-22. Unpublished raw data.
- Tennessee Department of Education. (2022). Annual coordinated school health school district applications, 2021-22. Unpublished raw data.
- Tennessee Department of Education. (2022). Physical activity compliance report, 2021-22. Unpublished raw data.
- Tennessee Department of Education. (2022). Quality physical education survey, 2021-22. Unpublished raw data.
- Tennessee State Board of Education. (2020). *Physical Activity and Physical Education Policy 4.206*. Retrieved from <https://www.tn.gov/content/dam/tn/stateboardofeducation/documents/2020-sbe-meetings/july-24%2c-2020-sbe-meeting/7-24-20%20IV%20F%20Physical%20Activity%20Policy%204.206%20Attachment%20Clean.pdf>.
- U.S. Department of Health and Human Services. (2018). *Physical Activity Guidelines for Americans, 2nd edition*. Washington, DC: U.S. Department of Health and Human Services.
- Weinberg, S. & Gould, D. (2007). Foundations of sport and exercise psychology. USA: Human Kinetics.